but also in the serous fluids of the body, normally, and when serous effusions occur. The salicylates are also found in œdema and in exudates containing pus, though in the last in small amount only. Salicylate of sodium was not present in the saliva, in the gastric juice, or bile.

On the other hand, the salts of iodine, given by the stomach or subcutaneously, are found in the urine and saliva, and, like the salicylates, in transudations into the skin, abdomen, and pleura; they are, however, not found in serous exudations or in those containing pus. Even when administered in large doses to healthy and diseased individuals, they were never present in the synovial fluid.

The iodides and salicylates differ from each other in this respect, that when the salicylates are administered they are widely distributed in the system, and may be found in all serous cavities as well as in the urine, while the iodides, on the contrary, are found only in transudations and never in normal or inflammatory effusions into joints or serous cavities.

The authors infer from such facts that the iodides are, therefore, useless in the treatment of articular rheumatism or inflammation of the pleura or peritoneum, since they do not reach the site of the disease; and, further, that since the salicylates are found in these cavities, they should be used not only in articular rheumatism but in inflammatory conditions of serous membranes.

Where the larger cavities are involved, as in pleuritic effusions, the authors recommend large doses of the salicylates, or their administration directly after thoracentesis. In fact, the injection of the salicylates into the cavity after tapping seems to have some advantages.

They believe that the rapid and successful course of a series of cases treated in this manner was the result of the administration of the salicylates combined with thoracentesis.—*Berliner klinische Wochenschrift*, No. 36, 1890.

Some New Clinical Experiments with Diuretin.

Koritschoner has recently made numerous clinical trials at the medical clinic of Professor Schrötter, of Vienna, with the new diuretic *diuretin*, which is a mixture of sodium salicylate and theobromine. These experiments pertained to thirty-eight cases of general dropsy. Ten of these were cases of cardiac dropsy from chronic valvular disease; twelve cases were of dropsy from Bright's disease in some stage; in six the general anasarca was due to dilatation of the heart following emphysema or arterio-sclerosis; in four the cause of the dropsy was degeneration of the myocardium; in three it was hepatic cirrhosis; in two it was tuberculosis of the lung and serous membranes; and in one, cancer of the liver.

The formula which Koritschoner uses is as follows:

Salicylate of soda and theobromine . . .	ʒj to ʒij.
Warm water	℥v.—M.

Dose, a teaspoonful every hour or every two hours.

Diuretin should be given in rather large doses—little benefit can be expected from a less quantity than four grammes (sixty grains) a day; ordinarily, to get the full advantages of the drug, medium doses amounting to five or six, and maximum doses amounting to eight or ten grammes, in the twenty-four hours, should be administered.

Diuretin is generally well supported, even when its use is prolonged for months. It rarely causes nausea, even in chronic Bright's disease, when the appetite is gone, and but little food is tolerated. It does not cause vertigo; in rare instances patients complain of palpitation and temporary cardiac distress. Sometimes diuretin provokes diarrhœa.

As a result of these trials by the Vienna physician, salicylate of soda and theobromine was found to be a very powerful diuretic, and in only five cases did it prove to be without action; these were cases of chronic Bright's disease, arterio-sclerosis with fatty myocardium, tuberculosis of the lungs and of serous membranes—all had arrived at the last degree of cachexia, and succumbed in a few days after their admission to the hospital. In ten other cases, the action of the salt was much superior to that of digitalis, acetate of potash, and all other diuretics that had been administered, though but moderate benefit followed the administration of the remedy. In the majority of the patients (twenty-three out of thirty-eight) the effect obtained was excellent, the dropsical effusions rapidly disappeared, and general amelioration followed. There is some danger under the abundant diuresis caused by the drug, the ascites and œdema may disappear so rapidly as to cause dangerous collapse. On this account, Koritschoner urges that in cases of abundant effusions the remedy should be given with caution; he would, in fact, advise always to begin the treatment by a dosage of one drachm a day, and if this quantity makes no sensible increase in the urine, it may be augmented by fifteen grains a day till a sufficient result is obtained.

The diuretic action of this medicine is said to be more marked in cardiac dropsies than in renal or hepatic, yet it may render precious service in chronic Bright's disease. In fact, in this disease, where all the ordinary diuretics are apt to fail, the quantity of urine excreted often becomes augmented five or six times under the influence of the salicylate of soda and theobromine. In some cases of Bright's disease the remedy seems to exert its principal action in the intestines, producing an abundant serous diarrhœa, which, in a very short time, causes the œdema to disappear, without too great enfeeblement of the patient.

According to the researches of Schröder and Gram, the diuretic effect of the salicylate and theobromine is due to the excitant action of the drug on the renal epithelium. As the epithelium is the principal seat of lesion in chronic parenchymatous nephritis, it might be feared that diuretin would be injurious in Bright's disease. The observations of Koritschoner show that this fear is not well founded, and that diuretin excites the renal functions without exciting the kidneys. Thus, in two cases of acute scarlatinous nephritis when Koritschoner gave diuretin in large doses, the patient recovered with astonishing rapidity, and without any complications. Under the influence of the medicament, the blood corpuscles and hyaline casts were seen from day to day to disappear from the urine. This same favorable action of diuretin on the nephritic processes has also been noted in chronic Bright's disease.[1]

The new drug has not as yet—as far as we have been able to ascertain—been much introduced into this country, and as theobromine is very expensive, and as the cost of a drug is an important item in the economies of many physicians and their patients, it is doubtful whether many serious trials will be made with diuretin for some time to come.—*Boston Medical and Surgical Journal*, No. 18, 1890.

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[1] Wiener klin. Wochschr., September 25, 1890; Semaine Médical, October 15, 1890.

MEDICINE.

UNDER THE CHARGE OF

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Aphasic and Amnesic Defects of Speech.

Bastian (*Lancet*, 1890, i. 1163) calls attention to the importance of a systematic and uniform mode of examination in the effort to discover the exact nature of a speech defect; as, unless this be made, a detailed diagnosis is extremely difficult. Speech defects of different kinds result from lesions in very different parts of the brain. While words are the vehicles of intellectual expression, the memory for words is fourfold, the four forms of verbal memory being registered in different parts of the cerebral hemispheres, the several centres being connected by commissures, and being called into activity by different combinations, according as we are listening, reading, writing, or speaking.

The four forms of verbal memory are these: (1) The auditory memories of words, which, we may say, are registered in the posterior part of the upper temporal convolution; (2) The visual memories of words, registered in some unknown part of the occipital lobe; (3) The glosso-kinæsthetic memories of words, or the memories of our articulatory sensations, which he believes to be located in the posterior part of the third frontal convolution; (4) The cheiro-kinæsthetic memories of words, or those of the sensations connected with writing movements, which he believes to be registered in the hinder part of the second frontal convolution. These last two centres are the sites from which, in speaking and writing respectively, volitional incitations issue through descending internuncial fibres, so as to arouse in appropriate modes the true motor centres situated in the medulla and spinal cord. He believes that the action of these last, as of all motor centres, is entirely devoid of all sensory accompaniments—that is to say, whilst movements are invariably preceded and incited by processes taking place in sensory nerve elements, and whilst the excitation of the movements invariably gives rise to a body of ingoing impressions (kinæsthetic) emanating from muscles, skin, joints, etc.; the actual nerve processes excited in the motor centres proper are devoid of any conscious accompaniment, and are wholly incapable of independent memorial recall. What he calls "motor centres proper" are commonly called lower motor centres. "Kinæsthetic centres" is his term for the cortical motor